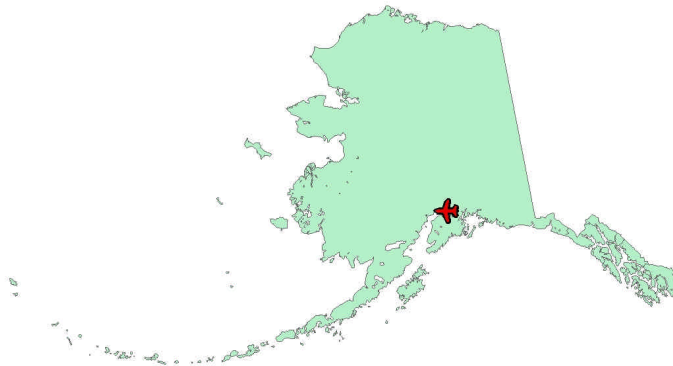


MERRILL FIELD AIRPORT



2004 Alaska Airport Pavement Condition Report

Scott Gartin, P.E.
 State Pavement Engineer
 Statewide Materials Section, Alaska DOT&PF
 5800 E. Tudor Road
 Phone: (907) 269-6244 Fax: (907) 269-6231
 Email: scott_gartin@dot.state.ak.us

Maps and report compiled by
 H. June Finkbiner
 Central Region Materials, Alaska DOT&PF

MERRILL FIELD AIRPORT - 2004

Contents:

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey – PCI Sample Unit Layout Plan
- PCI maps showing as-measured and predicted pavement conditions
- Age map showing pavement age as of January 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

- Location: Merrill Field is located just south of 5th Avenue near downtown Anchorage, Alaska. It is owned and operated by the Municipality of Anchorage.
- District: Anchorage Municipality
- Airport Manager: David Lundeby
- Engineer: Alex Jumao-As
- Pavement Surface: Asphalt Concrete
- Last Pavement Construction: 2003
- Pavement layout: Runways 15-33 and 6-24, 16 taxiways and 4 aprons.
- Design Aircraft: Twin Otter
- 2003 Enplanements: 11,211 – a 23% decrease from 2002
- Airport Class: Primary
- Last pavement condition survey: 2002
- Next planned pavement condition survey: 2005
- 2004 reported pavement maintenance and/or changed conditions: Taxiways A, B, C (300-03), D (400-02), J (1000-02) and K (1100-02) were reconstructed in 2003. Crack sealing programs continue. Runway 6-24 is planned for reconstruction in 2005.
- Recommendations: Seal cracks that are greater than ¼” wide and patch as required to maintain serviceability.

Date: 3 /20/2003

Branch Condition Report

Page 1 of 3

Pavement Database: NetworkID: Merrill

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
100 (Taxiway Alpha)	3	5,090.00	56.67	352,400.00	TAXIWAY	62.00	22.86	51.26
1000 (Taxiway Juliet)	2	285.00	65.00	21,300.00	TAXIWAY	63.50	12.50	62.85
1100 (TW Kilo)	2	555.00	117.50	64,675.00	TAXIWAY	72.50	15.50	66.78
1300 (Taxiway Mike)	3	925.00	40.00	37,700.00	TAXIWAY	92.00	5.89	90.12
1400 (Taxiway November)	2	3,768.00	57.50	281,275.00	TAXIWAY	93.50	6.50	87.41
1600 (Taxiway Papa)	1	180.00	55.00	14,175.00	TAXIWAY	100.00	0.00	100.00
1700 (Taxiway Quebec)	2	4,480.00	65.00	334,820.00	TAXIWAY	93.00	7.00	86.52
1800 (TW Romeo)	1	105.00	50.00	7,500.00	TAXIWAY	100.00	0.00	100.00
1900 (Taxiway Sierra)	1	200.00	165.00	33,000.00	TAXIWAY	100.00	0.00	100.00
200 (Taxiway Bravo)	2	1,115.00	72.50	78,625.00	TAXIWAY	68.00	24.00	86.73
300 (Taxiway Charlie)	3	2,565.00	86.67	170,500.00	TAXIWAY	79.33	18.55	93.97
400 (Taxiway Delta)	2	285.00	60.00	20,200.00	TAXIWAY	60.50	19.50	63.20
4100 (Northeast Parking Apron)	1	620.00	140.00	86,800.00	APRON	58.00	0.00	58.00
4200 (Lot 7 Parking Apron)	1	600.00	300.00	180,000.00	APRON	53.00	0.00	53.00
4300 (Transient Apron 1)	1	250.00	200.00	50,000.00	APRON	47.00	0.00	47.00
500 (TW Echo)	2	285.00	65.00	21,300.00	TAXIWAY	88.50	5.50	88.78

Date: 3 /20/2003

Branch Condition Report

Page 2 of 3

Pavement Database: NetworkID: Merrill

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
5000 (Compass Rose)	1	160.00	160.00	25,600.00	APRON	72.00	0.00	72.00
5100 (Medevac Helipad)	1	165.00	165.00	27,225.00	HELIPAD	41.00	0.00	41.00
600 (Taxiway Foxtrot)	2	355.00	65.00	28,800.00	TAXIWAY	88.00	4.00	87.22
6100 (Runway 15/33)	1	2,650.00	75.00	198,750.00	RUNWAY	61.00	0.00	61.00
6200 (Runway 6/24)	1	4,000.00	100.00	400,000.00	RUNWAY	47.00	0.00	47.00
700 (Taxiway Golf)	2	800.00	75.00	60,000.00	TAXIWAY	69.00	11.00	69.00
800 (Taxiway Hotel)	2	355.00	65.00	28,800.00	TAXIWAY	94.00	3.00	93.42

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	4	342,400.00	57.50	9.23	54.81
HELIPAD	1	27,225.00	41.00	0.00	41.00
RUNWAY	2	598,750.00	54.00	7.00	51.65
TAXIWAY	32	1,555,070.01	80.66	19.24	78.13
All	39	2,523,445.01	75.90	20.60	68.28

<div> <div>Date: 3 /20/2003</div> <div>Section Condition Report</div> <div>Page 1 of 3</div> </div>										
Pavement Database: NetworkID: Merrill										
Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
100 (Taxiway Alpha)	100-01	09/01/1997	AC	TAXIWAY	S	0	17,150.00	07/10/2002	5	94.00
100 (Taxiway Alpha)	100-02	09/01/1978	AC	TAXIWAY	P	0	296,250.00	05/31/2002	24	50.00
100 (Taxiway Alpha)	100-03	09/01/1980	AC	TAXIWAY	S	0	39,000.00	07/10/2002	22	42.00
1000 (Taxiway Juliet)	1000-01	08/01/1999	AC	TAXIWAY	S	0	10,100.00	07/10/2002	3	76.00
1000 (Taxiway Juliet)	1000-02	09/01/1978	AC	TAXIWAY	S	0	11,200.00	07/10/2002	24	51.00
1100 (TW Kilo)	1100-01	08/01/1999	AC	TAXIWAY	P	0	20,400.00	07/10/2002	3	88.00
1100 (TW Kilo)	1100-02	09/01/1978	AC	TAXIWAY	P	0	44,275.00	07/10/2002	24	57.00
1300 (Taxiway Mike)	1300-01	09/01/2002	AC	TAXIWAY	P	0	9,000.00	09/01/2002	0	100.00
1300 (Taxiway Mike)	1300-02	09/01/1996	AC	TAXIWAY	S	0	21,350.00	07/10/2002	6	86.00
1300 (Taxiway Mike)	1300-03	09/01/1997	AC	TAXIWAY	S	0	7,350.00	07/10/2002	5	90.00
1400 (Taxiway November)	1400-01	08/01/1999	AC	TAXIWAY	P	0	272,475.00	07/10/2002	3	87.00
1400 (Taxiway November)	1400-02	09/01/2002	AC	TAXIWAY	S	0	8,800.00	09/01/2002	0	100.00
1600 (Taxiway Papa)	1600-01	09/01/2002	AC	TAXIWAY	S	0	14,175.00	09/01/2002	0	100.00
1700 (Taxiway Quebec)	1700-01	09/01/2002	AC	TAXIWAY	S	0	12,320.00	09/01/2002	0	100.00
1700 (Taxiway Quebec)	1700-02	09/01/1997	AC	TAXIWAY	S	0	322,500.00	05/30/2002	5	86.00
1800 (TW Romeo)	1800-01	09/01/2002	AC	TAXIWAY	S	0	7,500.00	09/01/2002	0	100.00
1900 (Taxiway Sierra)	1900-01	09/01/2002	AC	TAXIWAY	P	0	33,000.00	09/01/2002	0	100.00
200 (Taxiway Bravo)	200-01	09/01/1978	AC	TAXIWAY	P	0	8,625.00	05/31/2002	24	44.00
200 (Taxiway Bravo)	200-02	07/01/1998	AC	TAXIWAY	S	0	70,000.00	05/30/2002	4	92.00
300 (Taxiway Charlie)	300-01	09/01/2002	AC	TAXIWAY	P	0	129,000.00	09/01/2002	0	100.00
300 (Taxiway Charlie)	300-02	08/01/1999	AC	TAXIWAY	P	0	30,000.00	05/30/2002	3	83.00
300 (Taxiway Charlie)	300-03	09/01/1978	AC	TAXIWAY	P	0	11,500.00	07/10/2002	24	55.00
400 (Taxiway Delta)	400-01	08/01/1999	AC	TAXIWAY	S	0	11,500.00	07/10/2002	3	80.00
400 (Taxiway Delta)	400-02	09/01/1978	AC	TAXIWAY	S	0	8,700.00	07/10/2002	24	41.00
4100 (Northeast Parking Apron)	4100-01	09/01/1980	AC	APRON	T	0	86,800.00	07/10/2002	22	58.00
4200 (Lot 7 Parking Apron)	4200-01	09/01/1978	AC	APRON	T	0	180,000.00	07/10/2002	24	53.00

Date: 3 /20/2003

Section Condition Report

Page 2 of 3

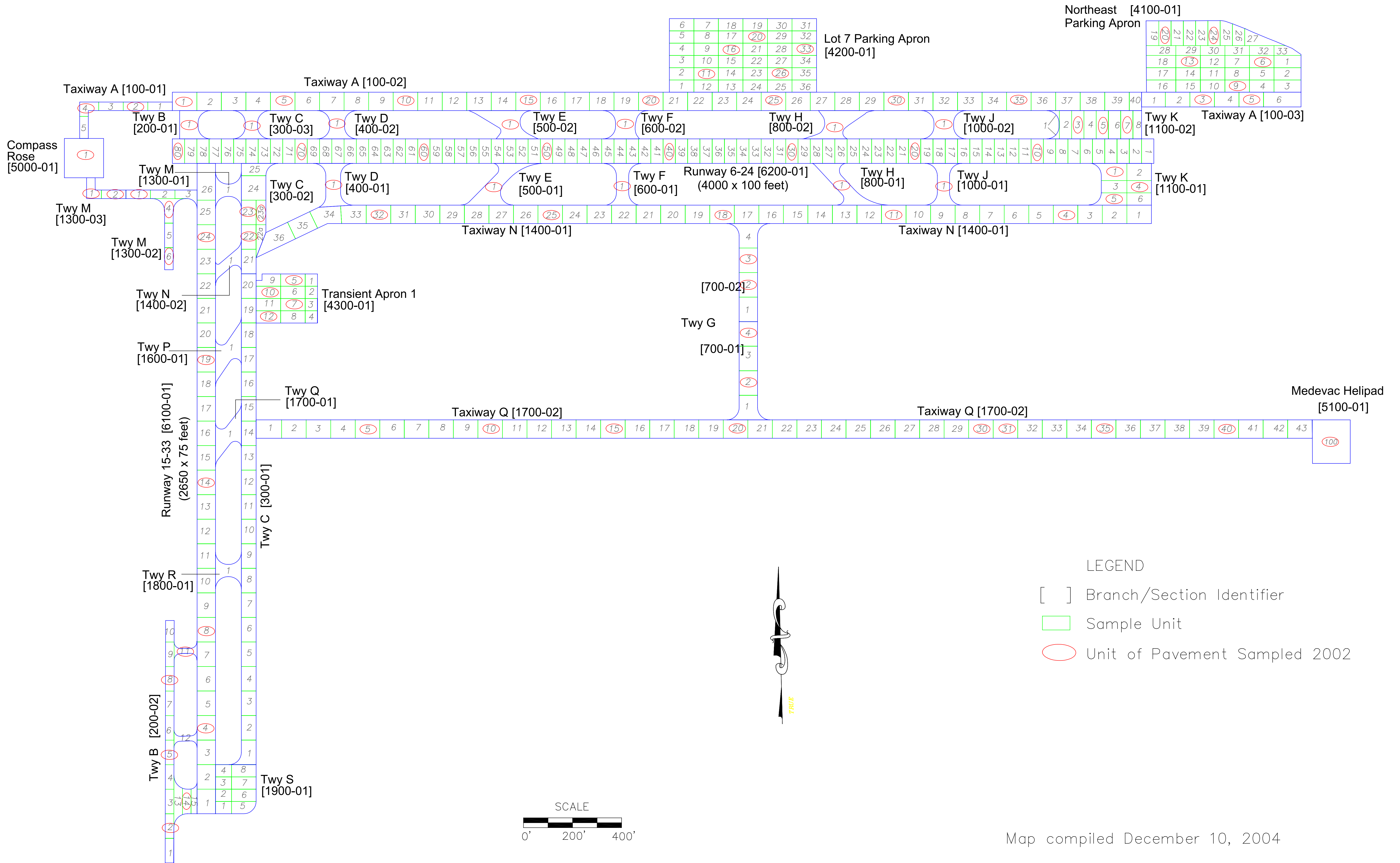
Pavement Database: NetworkID: Merrill

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
4300 (Transient Apron 1)	4300-01	09/01/1978	AC	APRON	T	0	50,000.00	07/10/2002	24	47.00
500 (TW Echo)	500-01	08/01/2001	AC	TAXIWAY	S	0	10,100.00	07/10/2002	1	83.00
500 (TW Echo)	500-02	08/01/2001	AC	TAXIWAY	S	0	11,200.00	07/10/2002	1	94.00
5000 (Compass Rose)	5000-01	09/01/1997	AC	APRON	T	0	25,600.00	05/31/2002	5	72.00
5100 (Medevac Helipad)	5100-01	09/01/1997	AC	HELIPAD	P	0	27,225.00	05/30/2002	5	41.00
600 (Taxiway Foxtrot)	600-01	08/01/2001	AC	TAXIWAY	S	0	17,200.00	07/10/2002	1	84.00
600 (Taxiway Foxtrot)	600-02	08/01/2001	AC	TAXIWAY	S	0	11,600.00	07/10/2002	1	92.00
6100 (Runway 15/33)	6100-01	09/01/1985	AC	RUNWAY	P	0	198,750.00	05/31/2002	17	61.00
6200 (Runway 6/24)	6200-01	09/01/1980	AC	RUNWAY	P	0	400,000.00	05/31/2002	22	47.00
700 (Taxiway Golf)	700-01	09/01/1996	AC	TAXIWAY	S	0	30,000.00	05/30/2002	6	80.00
700 (Taxiway Golf)	700-02	09/01/1980	AC	TAXIWAY	S	0	30,000.00	05/30/2002	22	58.00
800 (Taxiway Hotel)	800-01	08/01/2001	AC	TAXIWAY	S	0	17,200.00	07/10/2002	1	91.00
800 (Taxiway Hotel)	800-02	08/01/2001	AC	TAXIWAY	S	0	11,600.00	07/10/2002	1	97.00

Pavement Database:

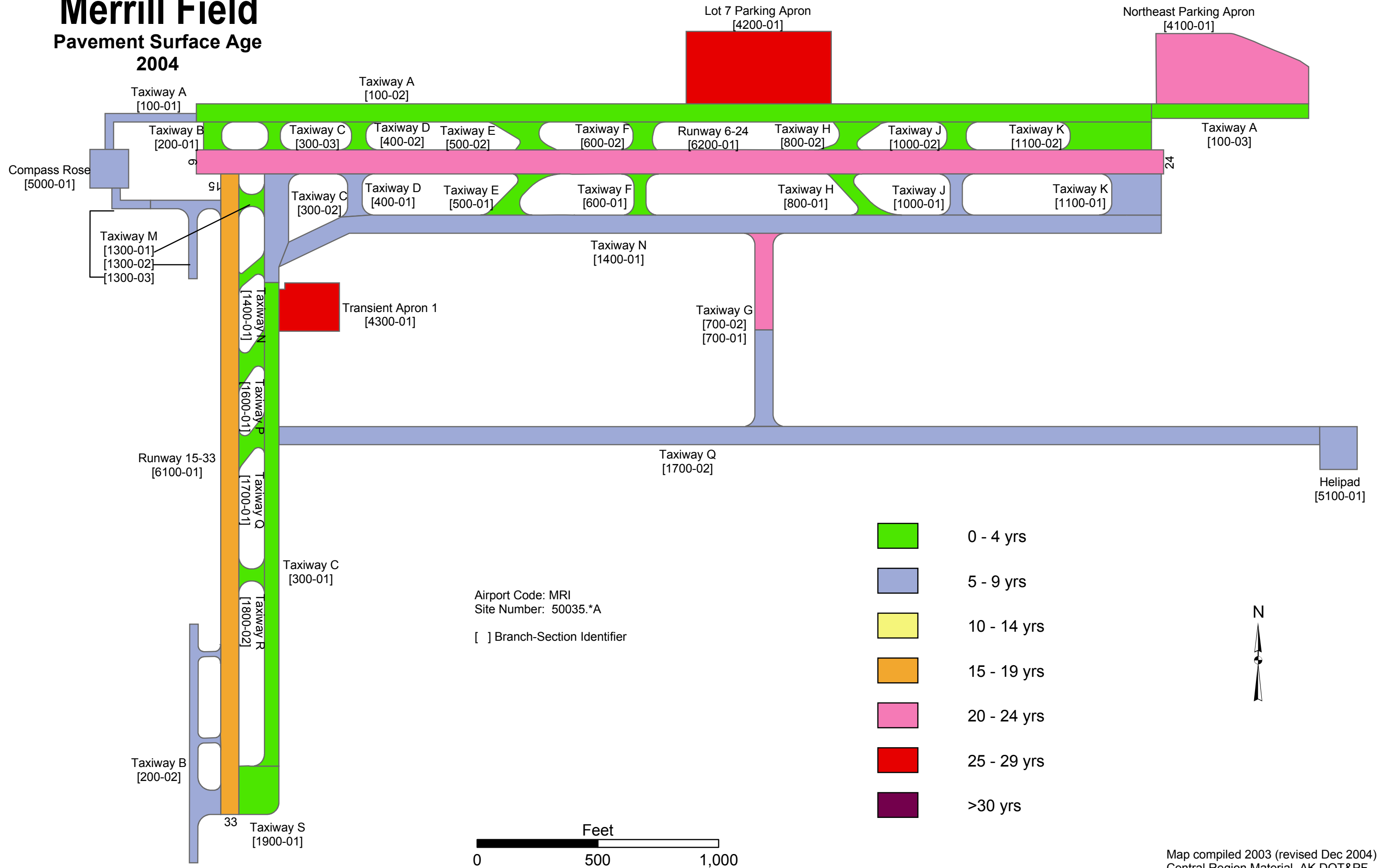
Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	0.46	292,695.00	13	95.46	6.00	97.28
03-05	4.00	814,300.01	11	80.82	14.12	84.84
06-10	6.00	51,350.00	2	83.00	3.00	82.49
16-20	17.00	198,750.00	1	61.00	0.00	61.00
21-25	23.33	1,166,350.00	12	50.25	5.85	50.05
All	9.21	2,523,445.01	39	75.90	20.60	68.28

		PAVEMENT STRENGTH SURVEY											
STATE Alaska		CITY	Anchorage	AIRPORT	Merrill Field					This is a variation of FAA Form 5320-1-1			
		CONSTRUCTION DATES											
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Existing Pavement Conditions (PCI) at last inspection	Soil Class	Subbase Course	Base Course	Surface Course	Overlay	Pavement Strength	
RUNWAYS													
6100-01	Runway 15/33	1985		Anchorage	Dynatest Engineering	61		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC	S20 S50,T80	
6200-01	Runway 6/24	1980		Anchorage	Dynatest Engineering	47		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
TAXIWAYS													
100-01	Taxiway Alpha Section 1	1997		Anchorage	Dynatest Engineering	94		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
100-02	Taxiway Alpha Section 2	1978	2003	Anchorage	Airport Manager	50		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
100-03	Taxiway Alpha Section 3	1980	2003	Anchorage	Airport Manager	42		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
200-01	Taxiway Bravo Section 1	1978	2003	Anchorage	Airport Manager	44		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
200-02	Taxiway Bravo Section 2	1998		Anchorage	Dynatest Engineering	92		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
300-01	Taxiway Charlie Section 1	1978	2002	Anchorage	Airport Manager	100		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
300-02	Taxiway Charlie Section 2	1978	1999	Anchorage	Airport Manager	83		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
300-03	Taxiway Charlie Section 3	1978	2003	Anchorage	Airport Manager	55		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
400-01	Taxiway Delta Section 1	1978	1999	Anchorage	Airport Manager	80		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
400-02	Taxiway Delta Section 2	1978	2003	Anchorage	Airport Manager	41		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
500-01	T/W Echo Section 1	1978	2001	Anchorage	Airport Manager	83		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
500-02	T/W Echo section 2	1978	2001	Anchorage	Airport Manager	94		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
600-01	Taxiway Foxtrot Section 1	1978	2001	Anchorage	Airport Manager	84		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
600-02	Taxiway Foxtrot Section 2	1978	2001	Anchorage	Airport Manager	92		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
700-01	Taxiway Golf Section 1	1996		Anchorage	Dynatest Engineering	80		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
700-02	Taxiway Golf Section 2	1980		Anchorage	Dynatest Engineering	58		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
700-03	Taxiway Golf Section 3	1980		Anchorage	Dynatest Engineering	47		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
700-04	Taxiway Golf Section 4	1980		Anchorage	Dynatest Engineering	49		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
800-01	Taxiway Hotel Section 1	1980	2001	Anchorage	Airport Manager	91		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
800-02	Taxiway Hotel section 2	1980	2001	Anchorage	Airport Manager	97		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1000-01	Taxiway Juliet Section 1	1978	1999	Anchorage	Airport Manager	76		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1000-02	Taxiway Juliet section 2	1978	2003	Anchorage	Airport Manager	51		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1100-01	T/W Kilo Section 1	1978	1999	Anchorage	Airport Manager	88		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1100-02	T/W Kilo Section 2	1978	2003	Anchorage	Airport Manager	57		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1300-01	Taxiway Mike Section 1	1978	2002	Anchorage	Airport Manager	100		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1300-02	Taxiway Mike section 2	1996		Anchorage	Dynatest Engineering	86		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1300-03	Taxiway Mike Section 3	1997		Anchorage	Dynatest Engineering	90		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1400-01	Taxiway November Section 1	1978	1999	Anchorage	Airport Manager	87		10 to 12 inch backfill	2-4 inch level course	2 inch AC	2 to 3 inch AC		
1400-02	Taxiway November Section 2	1980	2002	Anchorage	Airport Manager</								



Merrill Field

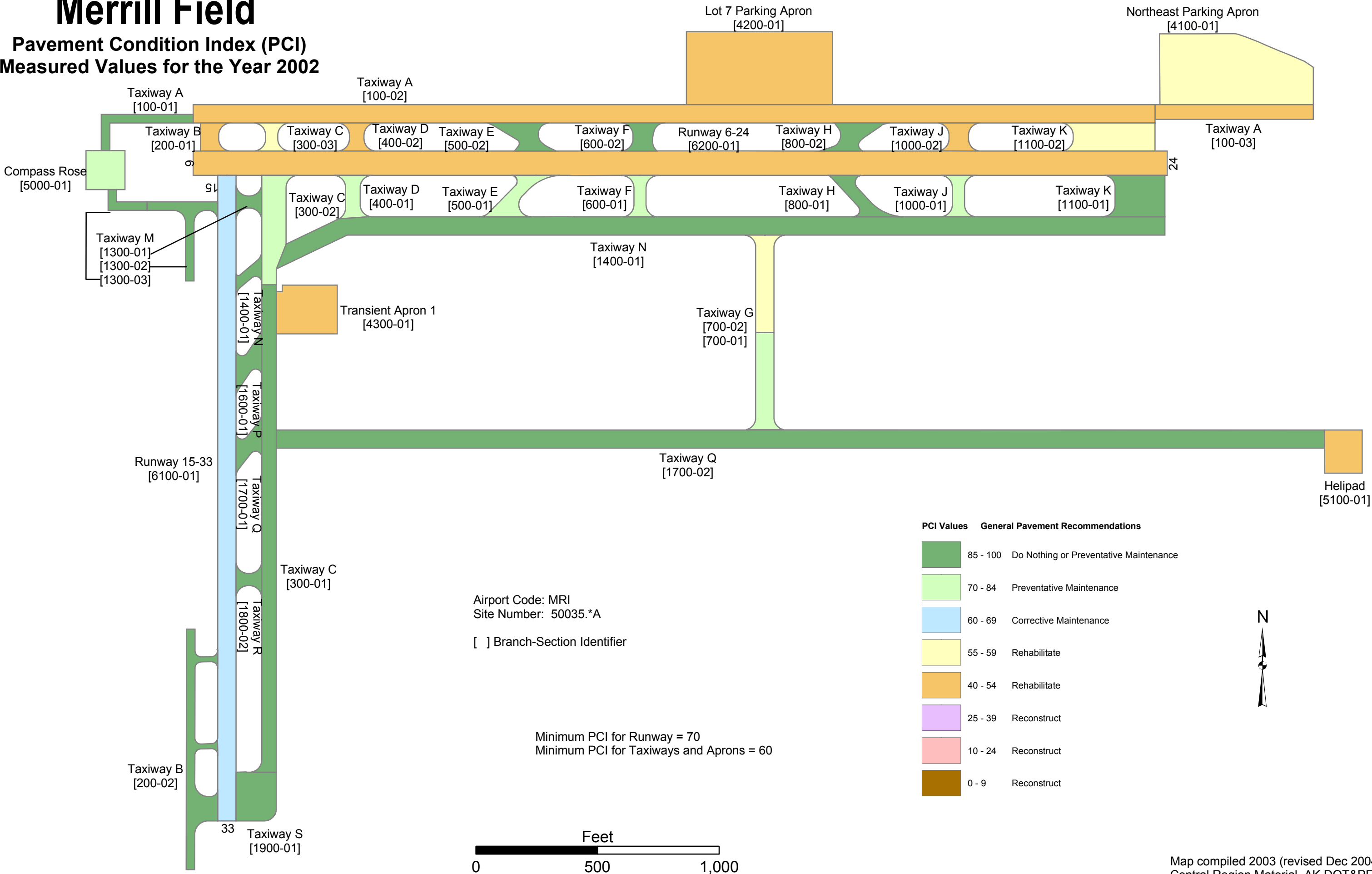
Pavement Surface Age
2004



Map compiled 2003 (revised Dec 2004)
Central Region Material, AK DOT&PF

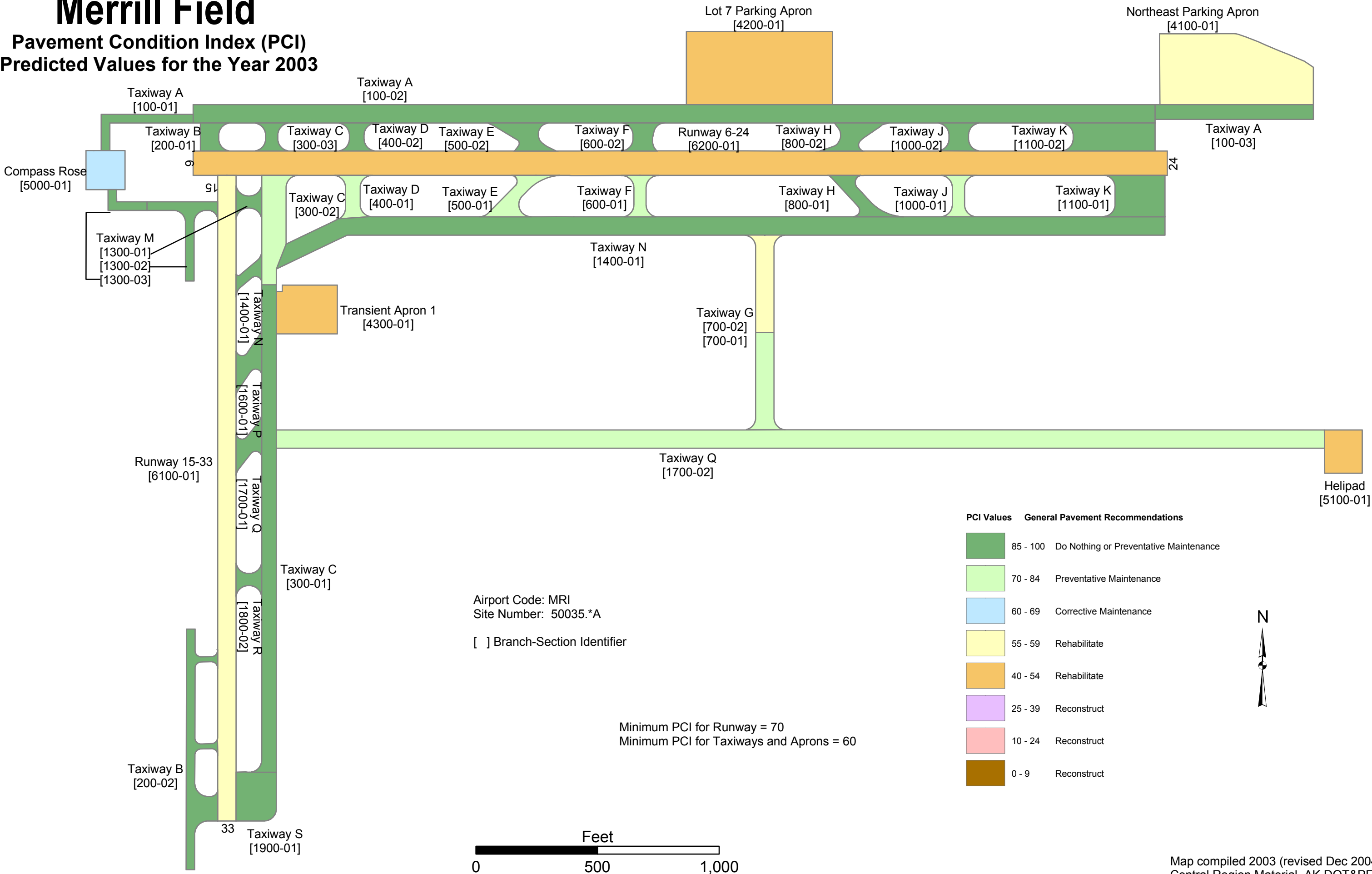
Merrill Field

Pavement Condition Index (PCI) Measured Values for the Year 2002



Merrill Field

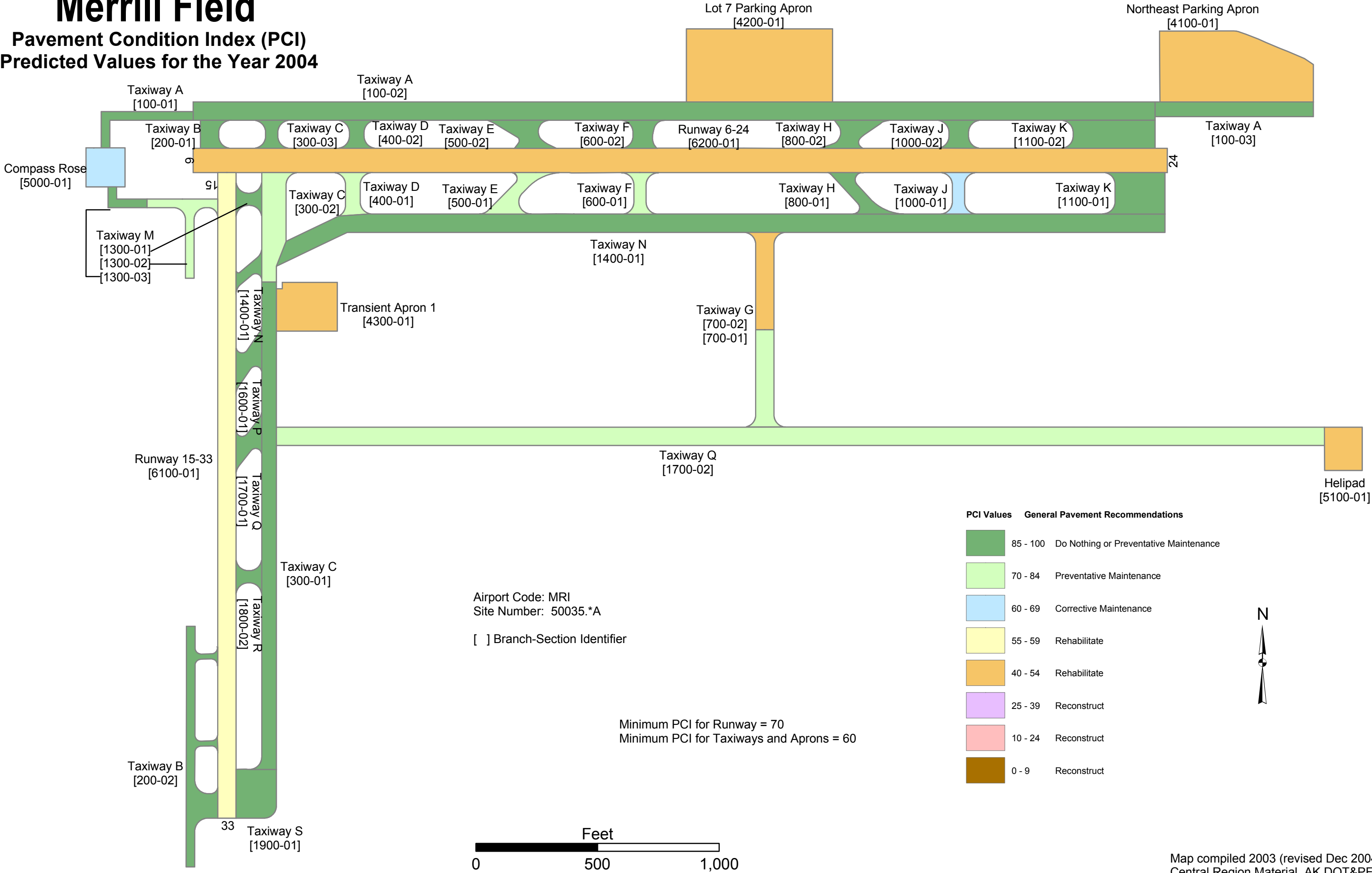
Pavement Condition Index (PCI) Predicted Values for the Year 2003



Merrill Field

Pavement Condition Index (PCI)

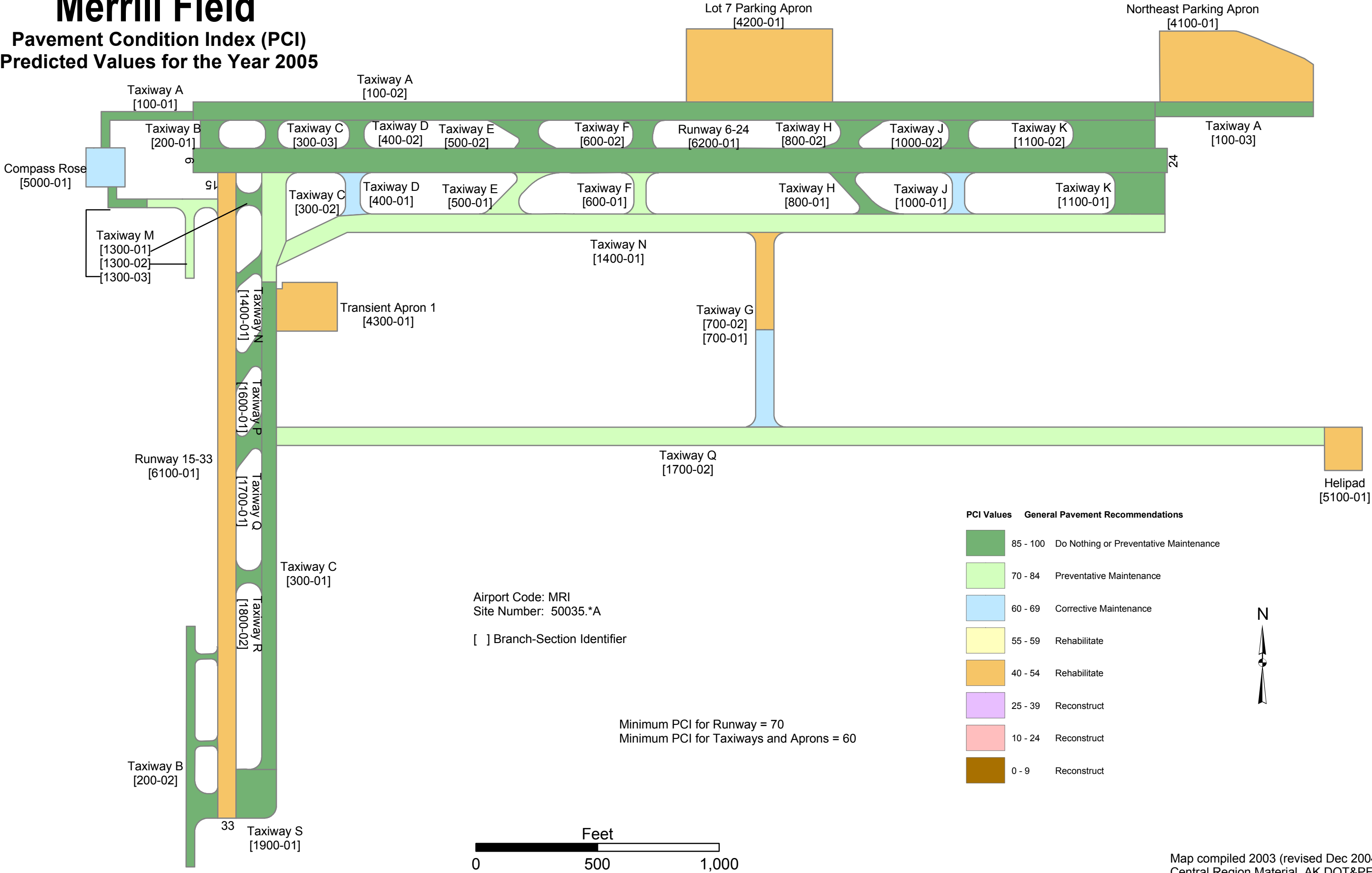
Predicted Values for the Year 2004



Merrill Field

Pavement Condition Index (PCI)

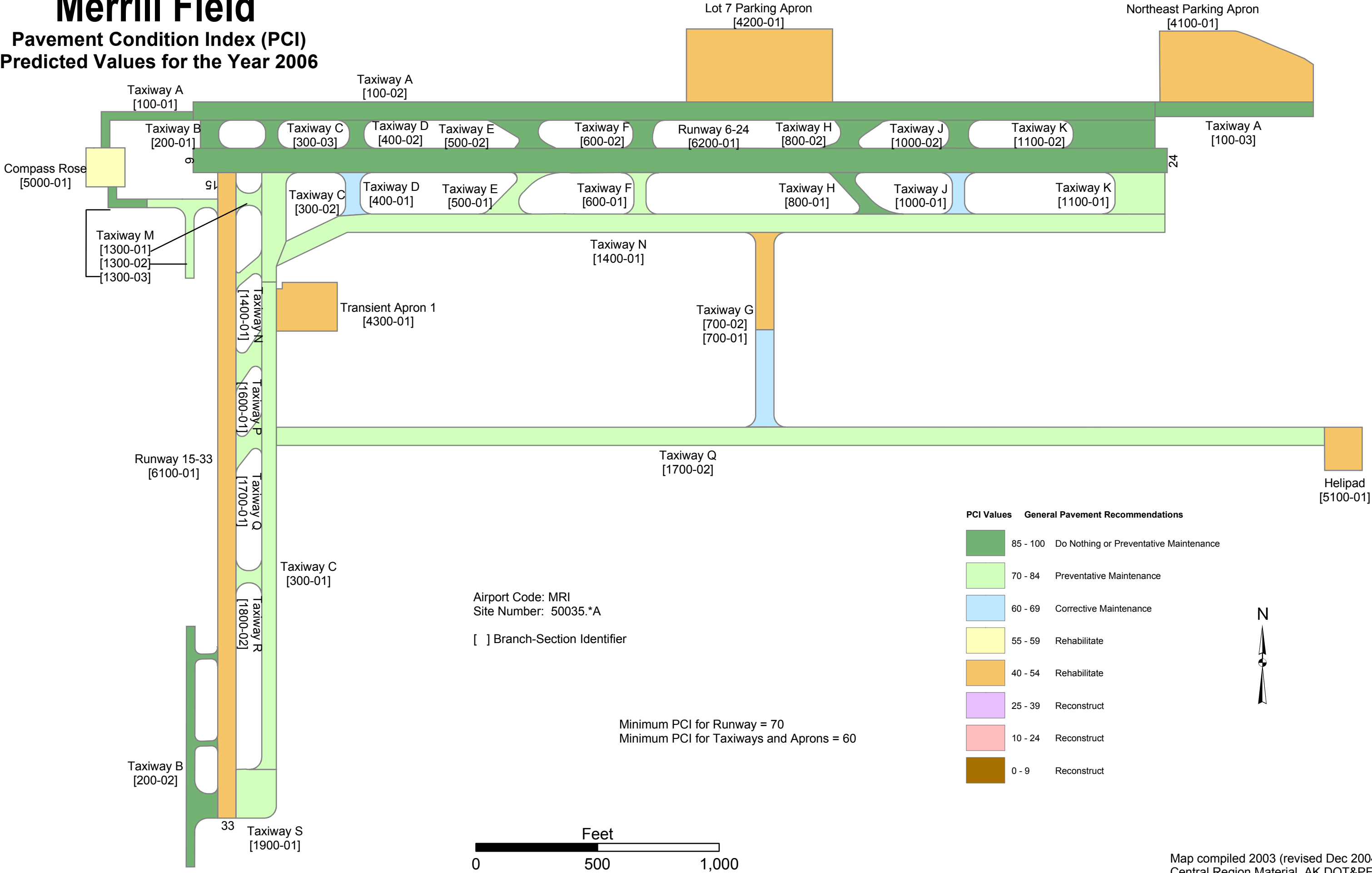
Predicted Values for the Year 2005



Merrill Field

Pavement Condition Index (PCI)

Predicted Values for the Year 2006



Merrill Field

Pavement Condition Index (PCI)

Predicted Values for the Year 2007

